

Notice of Allowability

Application No.

10/090,413

Examiner

Igor N. Borissov

Applicant(s)

TAMATA ET AL.

Art Unit

3628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Request for Continued Examination (RCE) OF 04/30/2007.
2. ☒ The allowed claim(s) is/are 1-21.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

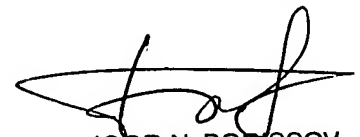
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material

5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


IGOR N. BORISSOV
PRIMARY EXAMINER

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/30/2007 has been entered.

Response to Amendment

Amendment received on 4/30/2007 is acknowledged and entered. Claims 1-6, 8-14, 16-20 have been amended. New claim 21 has been added. Claims 1-21 are currently pending in the application.

Claim Rejections under 35 USC § 112 and 35 USC § 103 have been withdrawn due to the applicant's amendment.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

IN THE CLAIMS

1. (Currently amended) A process for treating perfluoride released from a manufacturer's plant by perfluoride treating apparatus owned and provided by an independent separate perfluoride treatment service provider, comprising:

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installing the perfluoride treating apparatus ~~owned by the~~ independent separate perfluoride treatment service provider at the manufacturer's plant, and connecting the perfluoride treating apparatus to the manufacturer's plant~~[[;]]~~, the perfluoride treating apparatus owned by the independent separate perfluoride treatment service provider;

using the perfluoride treating apparatus to treat perfluoride released from the manufacturer's plant;

recording information generated by the perfluoride treatment;

calculating a cost and an amount of the perfluoride treatment based on the recorded information;

billing the manufacturer the calculated cost.

2. (Currently amended) A process for treating perfluoride released from a manufacturer's plant by a perfluoride treating apparatus owned and provided by an independent separate perfluoride treatment service provider, comprising:

installing the perfluoride treating apparatus ~~owned by the~~ independent separate perfluoride treatment service provider at the manufacturer's plant, and connecting the perfluoride treating apparatus to the manufacturer's plant~~[[;]]~~, the perfluoride treating apparatus owned by the independent separate perfluoride treatment service provider;

using the perfluoride treating apparatus to treat perfluoride released from the manufacturer's plant;

recording information generated by the perfluoride treatment;

calculating a cost and an amount of the perfluoride treatment based on the recorded information, wherein the cost is transmitted to a server of the independent separate perfluoride treatment service provider via a network;

billing the manufacturer the calculated cost.

3. (Currently amended) The process according to Claim 1, wherein the recorded information is transmitted via communication circuits and indicated on a display device.

4. (Currently amended) The process according to Claim 1, wherein ~~[[the]]~~ the recorded information includes a flow rate of exhaust gas from the manufacturer's plant.

5. (Currently amended) The process according to Claim 1, wherein the recorded information includes ~~[[on]]~~ a flow rate of PFC gas supplied to the manufacturer's plant.

6. (Currently amended) The process according to Claim 1, wherein the recorded information includes a number of sheets of at least one of ~~either~~ blank material supplied to the manufacturer's plant ~~[[or]]~~ and material taken out from the manufacturer's plant.

7. (Original) The process according to Claim 6, wherein the blank material is wafer.

8. (Currently amended) The process according to Claim 1, wherein the manufacturer's plant is a semiconductor manufacturing plant, and the recorded information includes an amount of perfluoride required for working wafers in the manufacturer's plant.

9. (Currently amended) The process according to Claim 1, wherein the manufacturer's plant is at least one of ~~either~~ a semiconductor manufacturing plant ~~[[or]]~~ and a liquid crystal producing plant.

10. (Currently amended) A system for treating perfluoride released from a manufacturer's plant by a perfluoride treating apparatus owned and provided by an independent separate perfluoride treatment service provider, comprising:

means of treating perfluoride connected to the manufacturer's plant~~[[;]]~~ by the independent separate perfluoride treatment service provider;

means for estimating a decomposition treated amount of perfluoride contained in exhaust gas from a manufacturer's plant based on data of an operation of the manufacturer's plant,

wherein the data of the operation are transmitted by a communication means to a [[a]] the independent separate perfluoride treatment service provider;

means for calculating a cost of treatment of the perfluoride based on an estimated amount of the perfluoride treated; and

means of billing the manufacturer.

11. (Currently amended) The process according to Claim 2, wherein the recorded information is transmitted via communication circuits and indicated on a display device.

12. (Currently amended) The process according to Claim 2, wherein the recorded information includes a flow rate of exhaust gas from the manufacturer's plant.

13. (Currently amended) The process according to Claim 2, wherein the recorded information includes a flow rate of PFC gas supplied to the manufacturer's plant.

14. (Currently amended) The process according to Claim 2, wherein the recorded information includes a number of sheets of at least one of ~~either~~ blank material supplied to the manufacturer's plant [[or]] and material taken out from the manufacturer's plant.

15. (Original) The process according to Claim 14, wherein the blank material is wafer.

16. (Currently amended) The process according to Claim 2, wherein the manufacturer's plant is a semiconductor manufacturing plant, and the recorded information includes an amount of perfluoride required for working wafers in the semiconductor manufacturing plant.

17. (Currently amended) The process according to Claim 2, wherein the manufacturer's plant is at least one of ~~either~~ a semiconductor manufacturing plant ~~[[or]]~~ and a liquid crystal producing plant.

18. (Currently amended) A process system for treating perfluoride released from a manufacturer's plant by a perfluoride treating apparatus owned and provided by an independent separate perfluoride treatment service provider, comprising:

the perfluoride treatment apparatus connected to the manufacturer's plant~~[[;]]~~ by the independent separate perfluoride treatment service provider;

a first computer configured to estimate a treated amount of perfluoride contained in exhaust gas from the manufacturer's plant based on a data of an operation of the manufacturer's plant, wherein the data of the operation ~~[[are]]~~ is transmitted by a communications network to ~~[[an]]~~ the independent separate perfluoride treatment service provider~~[[,]]; and[[;]]~~

a second computer configured to calculate a cost of treatment of the perfluoride based on the estimated amount of the perfluoride treated.

19. (Currently amended) The process system according to claim 18, wherein the first computer is a part of a decomposition treating apparatus.

20. (Currently amended) The process system according to claim 18 wherein the second computer includes an information terminal and means for connecting to the communications network in the Internet.

Allowable Subject Matter

Claims 1-21 are allowed.

The following is an examiner's statement of reasons for allowance:

As per independent claims 1, 2 and 10, the best prior art, Arno in view of Faeth, teaches a method and system for treating perfluorides generated during semiconductor manufacturing (by treatment undertaker); considering factors which can increase or decrease a cost of said treatment of said perfluorides; calculating a cost of said treatment of said perfluorides, wherein information regarding the amount of pollutants treated is transmitted to a server, and wherein the server receives the information of an amount of pollutants treated from a plurality of pollutants generated entities.

However, Arno in view of Faeth fails to teach or fairly suggest installing the perfluoride treating apparatus by an independent separate perfluoride treatment service provider at the manufacturer's plant, and connecting the perfluoride treating apparatus to the manufacturer's plant, wherein said perfluoride treating apparatus owned by said independent separate perfluoride treatment service provider.

The best foreign art, Mori et al. (EP 1 129 775 A1), while teaching a method and system of decomposing a fluorine-containing compound in manufacturing environment, fails to teach or fairly suggest installing the perfluoride treating apparatus by an independent separate perfluoride treatment service provider at the manufacturer's plant, and connecting the perfluoride treating apparatus to the manufacturer's plant, wherein said perfluoride treating apparatus owned by said independent separate perfluoride treatment service provider.

The remaining dependent claims are considered allowable, as they are dependent and based on allowable independent claims.

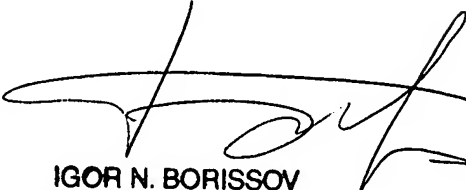
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submission should be clearly labeled "Comments on Statement of Reason for Allowance".

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Igor Borissov whose telephone number is 571-272-6801. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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07/07/2007


IGOR N. BORISSOV
PRIMARY EXAMINER